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EXAMINER

CHOI, PETER H

ART UNIT PAPER NUMBER

3623

DATE MAILED: 06/16/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/828,530

Applicant(s)

NABE ET AL.

Examiner

Peter Choi

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 April 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-45 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-45 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 July 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>7/30/01</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1 – 45 are pending in the application.

Information Disclosure Statement

2. The information disclosure statement (IDS) submitted on 7/30/01 is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner. However, one of the documents specified by the applicant, U.S Patent #5,962,289 is incorrectly identified as belonging to Yoshinaga. The patent specified belongs to Kilburn et al. and is titled, "Polysaccharide binding fusion proteins and conjugates" and is not being considered.

Drawings

3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description:
 - In Figure 5, reference character 156 appears to refer to dealers, but is not mentioned in the specification.
 - In Figure 9, reference character 245 appears to refer to the modeling analysis module, but is not mentioned in the specification. However, paragraph 90 on page 21 uses reference character 246 for this module.

Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 16-20 and 32 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 16-20 recite a system per se but it is unclear as to what statutory class it belongs to. The claims are dependent on claim 10, which is a method claim. Claims are limited to a single statutory class. For the purposes of the following art rejection, the examiner has assumed that claims 16-20 are instead dependent on system claim 11.

Claim 32 recites a computer-readable medium per se but it is unclear as to what statutory class it belongs to. The claim is dependent on claim 29, which is a database. Claims are limited to a single statutory class. For the purposes of the following art rejection, the examiner has assumed that claim 32 is instead dependent on computer-readable medium claim 30.

Claim Rejections - 35 USC § 101

6. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

7. Claims 1-10, 21-33, and 43-45 are rejected under 35 U.S.C. 101 because the claimed invention is direct to non-statutory subject matter.

The basis of this rejection is set forth in a two-prong test of:

- (1) whether the invention is within the technological arts; and
- (2) whether the invention produces useful, concrete and tangible results.

For a claimed invention to be statutory, the claimed invention must be within the technological arts. Mere ideas in the abstract (i.e., abstract idea, law of nature, natural phenomena) that do not apply, involve, use, or advance the technological arts fail to

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promote the "progress of science and the useful arts" (i.e., the physical sciences as opposed to social sciences, for example) and therefore are found to be non-statutory subject matter. For a process claim to pass muster, the recited process must somehow apply, involve, use, or advance the technological arts.

Mere intended or nominal use of a component, albeit within the technological arts, does not confer statutory subject matter to an otherwise abstract idea if the component does not apply, involve, use, or advance the underlying process. The claimed invention is not within the technological arts – i.e., no computer implementation or other technology is employed.

In the present case, none of the recited steps in claims 1-10 are directed to anything in the technological arts as explained above. Looking at the claims as a whole, nothing in the body of the claims recites any structure or functionality to suggest that a computer (or any other technological component) performs the steps. Furthermore, the recited steps of predicting customer behavior and producing a list of potential customers for distribution based on an applied model or algorithm on customer data does not apply, involve, use, or advance the technological arts since all of the recited steps can be performed by use of a pencil and paper. The claims provide nominal recitations of technology in using a database to provide customer information, providing results to the database, and hosting the results on the Internet, where dealers can access the results.

Software, programming, instructions or code not claimed as embodied in computer-readable media are descriptive material per se and are non statutory because they are not capable of causing functional change in a computer. When such descriptive material is recorded on some computer-readable medium it becomes structurally and functionally interrelated to the medium and will be statutory in most cases.

Claim 26 recites a database comprising of "data", a collection of nonfunctional descriptive material. Claim 30 recites a computer-readable medium comprises a collection of nonfunctional descriptive material (customer information and potential customers and "rules"). Claim 43 recites a database comprising of data and "rules" which are construed to be nonfunctional descriptive material. Databases inherently are used to store data and information that is manipulated by a computer (through software, programming, instructions, or code) or a database management system. Merely claiming nonfunctional descriptive material stored in a computer-readable medium does not make the invention eligible for patenting.

8. Claims 21-25 and 30-33 are rejected under 35 U.S.C. 101 because the disclosed invention is inoperative and therefore lacks utility.

Claim 21 recites a computer programmed to prompt users to select criteria for predicting the likelihood of response, but fails to recite any components of computer architecture (i.e., a processor, memory, input device, display unit, etc.). Claim 21 also

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fails to cite any software, programming, instructions, or code capable of causing functional change in a computer. Without these components, a "computer" would be unable to perform any function, rendering the claim (and all dependent claims) inoperable.

Claim 30 recites a collection of potential customer data and rules for identifying customers and the time at which they will respond to offers. Claim 30 is deemed to be directed to non-statutory subject matter since in the absence of any software, programming, instructions, or code that embody the cited rules, there is no indication that the proposed computer-readable medium has any means of being executed by a computer.

Furthermore, software, programming, instructions, or code not claimed as being computer executable are not statutory because they are not capable of causing functional change in a computer. In contrast, when a claimed computer-readable medium encoded with a computer program defines structural and functional interrelationships between the computer and the program, and the computer is capable of executing the program, allowing the program's functionality to be realized, the program will be statutory.

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9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 1-45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson et al. (U.S Patent #6,078,892), and further in view of Blume et al. (U.S Patent #6,839,682).

As per claim 1, Anderson et al. teaches a method for generating customer leads for use by dealers attempting to sell a product, said method comprising the steps of:

providing a database of customer information (**records containing data and information of interest relating to different customers**) [Claim 1, Column 11, lines 56-58];

generating a potential customer list (**defining a collection of customer records which satisfy a set of predetermined preferences**); [Claim 1] and

providing the potential customer list (**outputting the collection of ordered customer records**) to one or more dealers [Claim 1].

Although not taught by Anderson et al., Blume et al. teaches the steps of:

predicting a propensity for one or more customers within the database to respond to an offer (**predict responses to particular offers or other marketing schemes**) [Column 12, lines 13-15, Claim 2];

predicting when the customers will respond to the offer (**predicting behavior of the target consumer; predicting spending within a predicted time period**) [Claims 9 and 24];

Scoring, or predicting which prospects will buy products and services will minimize selling costs while maximizing revenue. Companies will be able to formulate better, more targeted promotional campaigns if they know in advance who is most likely to buy their products. Predicting future sales, resource requirements, client needs, or market share would enable a company to manage resources effectively, and accurate projections enable companies to create more efficient plans. It would have been obvious to one of ordinary skill in the art at the time of invention that the method taught by Anderson et al. would have benefited from including the predictive steps as taught by Blume et al. because the resulting method would provide for a more efficient, effective, and robust marketing approach, which would lead to increased profits and revenue.

As per claim 2, although not taught by Anderson et al., Blume et al. teaches a method according to claim 1 wherein said step of predicting a propensity further comprises the step of identifying potential customers using a propensity (**predictive**) model [Column 4, lines 63-65, Column 5, lines 12-13]. It would have been obvious to one of ordinary skill in the art at the time of invention to modify the teachings of Anderson et al. to include a propensity model as taught by Blume et al. since the

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resulting method would provide for a more efficient, effective, and robust marketing approach, which would lead to increased profits and revenue.

As per claim 3, although not taught by Anderson et al., Blume et al. teaches a method according to claim 1 wherein said step of predicting when the customers will respond further comprises the step of identifying when customers will respond using a timing model **(predicting behavior of the target consumer; predicting spending within a predicted time period)** [Claims 9 and 24]. It would have been obvious to one of ordinary skill in the art at the time of invention to modify the teachings of Anderson et al. to include a timing model as taught by Blume et al. since the resulting method would provide for a more efficient, effective, and robust approach towards marketing, resource requirements, client needs and market share, which would lead to increased profits and revenue.

As per claim 4, the combined teachings of Anderson et al. and Blume et al. fail to specifically teach a method according to claim 1 wherein the customer information includes customer information on at least one of active customer files and inactive customer files.

However, Official Notice is taken that companies retain customer information is retained on all customers (for a reasonable length of time), which would include currently active and inactive customers. It would have been obvious to one of ordinary

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skill in the art at the time of invention to apply the combined teachings of Anderson et al. and Blume et al. to include all customers (current and past, active and inactive) in an attempt to develop marketing strategies and offers with a higher likelihood of customer response, which would lead to increased profits and revenue.

As per claim 5, although not taught by Anderson et al., Blume et al. teaches the step of generating a potential customer list further comprising:

clustering customers into customer groups according to customer characteristics **(generating groupings based on the analysis of consumer financial behavior)**

[Column 3, lines 20-26]; and

identifying specific needs **(underlying consumer interests)** for each customer group [Column 3, lines 25-26].

It would have been obvious to one of ordinary skill in the art at the time of invention to modify the teachings of Anderson et al. to include the clustering step as taught by Blume et al. in order to create specialized offers best suited to meet the specific needs of customers based on the customer segment they are clustered into.

As per claim 6, Anderson et al. teaches a method according to claim 1 wherein said step of providing the potential customer list further comprises the steps of:

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hosting the customer list **(stored on memory)** on a web-based system **(accessible through a LAN, WAN or any other conventional method of interconnecting computers)**; [Column 11, lines 62-65 and Column 12, lines 5-12]

Although not taught by Anderson et al. or Blume et al., Official Notice is taken that the step of providing dealers with access to a web-based system is old and well known in the art. Dealers could be provided with user accounts (complete with passwords and data encryption methods) to enable secure access to the customer lead information and would prevent unauthorized users from viewing sensitive proprietary data. It would have been obvious to one of ordinary skill in the art at the time of invention to modify the combined teachings of Anderson et al. and Blume et al. to provide authorized users with alternative means of accessing the customer list information.

As per claim 7, Anderson et al. teaches a method according to claim 1 wherein said step of providing the potential customer list further comprises the step of providing dealer access to the customer list through a telephone based system **(land-based telephone line, or cellular line)** [Column 12, lines 11-12].

As per claim 8, the combined teachings of Anderson et al. and Blume et al. fail to teach a method according to claim 1 wherein said step of providing the potential

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customer list further comprises the step of mailing the customer list to the dealers through at least one of electronic-mail, the postal service, and a courier service.

However, Official Notice is taken that the concept of mailing information to customers via electronic mail, the postal service, or a courier service is a direct marketing concept that is old and well known in the art. It would have been obvious to one of ordinary skill in the art at the time of invention to modify the combined teachings of Anderson et al and Blume et al. to include the physical delivery of the potential customer list in order to enable the company to provide such information to individuals incapable or unwilling to view the information using digital or telephonic methods.

As per claim 9, Anderson et al. teaches a method according to claim 1 further comprising the step of providing results of customer contacts (**storing data records satisfying one or more traits**) to the database (**in the storage device or other memory**) of customer information [Column 5, lines 45-47].

As per claim 10, although not taught by Anderson et al., Blume et al. teaches a method according to claim 1 wherein said step of providing the potential customer list further comprises the steps of determining which customers will respond to a dealer initiated contact (**response to particular offers or marketing schemes**) using a direct response model [Column 12, lines 14-15].

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As per claim 11, Anderson et al. teaches a system for generating customer leads for use by dealers attempting to sell a product comprising:

one or more databases of customer information (**records containing data and information of interest relating to different customers**) [Claim 1, Column 11, lines 56-58];

a network [Column 12, line 7]; and

at least one computer (**workstation**) connected to said server via said network;
and

a workstation configured to:

generate a potential customer list (**defining a collection of customer records which satisfy a set of predetermined preferences**); [Claim 1] and

provide the potential customer list (**outputting the collection of ordered customer records**) to one or more dealers [Claim 1].

Although not taught by Anderson et al., Blume et al. teaches software to:

predict a propensity for one or more customers within the database to respond to an offer (**predict responses to particular offers or other marketing schemes**) [Column 12, lines 13-15, Claim 2];

predict when the customers will respond to the offer (**predicting behavior of the target consumer; predicting spending within a predicted time period**) [Claims 9 and 24];

Scoring, or predicting which prospects will buy products and services will minimize selling costs while maximizing revenue. Companies will be able to formulate better, more targeted promotional campaigns if they know in advance who is most likely to buy their products. Predicting future sales, resource requirements, client needs, or market share would enable a company to manage resources effectively, and accurate projections enable companies to create more efficient plans. It would have been obvious to one of ordinary skill in the art at the time of invention that the method taught by Anderson et al. would have benefited from including the predictive steps as taught by Blume et al. because the resulting method would provide for a more efficient, effective, and robust marketing approach, which would lead to increased profits and revenue.

Although not specifically taught by the combined teachings of Anderson et al. and Blume et al., the presence of a computer network taught by Anderson et al. inherently implies the presence of a server to connect all the computer workstations together.

As per claim 12, although not taught by Anderson et al., Blume et al. teaches a system configured to identify potential customers using a propensity (**predictive**) model [Column 4, lines 63-65, Column 5, lines 12-13]. It would have been obvious to one of ordinary skill in the art at the time of invention to modify the teachings of Anderson et al. to include a propensity model as taught by Blume et al. since the resulting system would

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provide for a more efficient, effective, and robust marketing approach, which would lead to increased profits and revenue.

As per claim 13, although not taught by Anderson et al., Blume et al. teaches a system configured to predict when the customers will respond to the offer using a timing model (**predicting behavior of the target consumer; predicting spending within a predicted time period**) [Claims 9 and 24]. It would have been obvious to one of ordinary skill in the art at the time of invention to modify the teachings of Anderson et al. to include a timing model as taught by Blume et al. since the resulting method would provide for a more efficient, effective, and robust approach towards marketing, resource requirements, client needs and market share, which would lead to increased profits and revenue.

As per claim 14, the combined teachings of Anderson et al. and Blume et al. fail to specifically teach a system wherein the database comprises data corresponding to active and inactive customer files.

However, Official Notice is taken that companies retain customer information is retained on all customers (for a reasonable length of time), which would include currently active and inactive customers. It would have been obvious to one of ordinary skill in the art at the time of invention to apply the combined teachings of Anderson et al. and Blume et al. to include all customers (current and past, active and inactive) in an

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attempt to develop marketing strategies and offers with a higher likelihood of customer response, which would lead to increased profits and revenue.

As per claim 15, although not taught by Anderson et al., Blume et al. teaches the step:

clustering customers into customer groups according to customer characteristics **(generating groupings based on the analysis of consumer financial behavior)**

[Column 3, lines 20-26]; and

identifying specific needs **(underlying consumer interests)** for each customer group [Column 3, lines 25-26].

It would have been obvious to one of ordinary skill in the art at the time of invention to modify the teachings of Anderson et al. to include the clustering step as taught by Blume et al. in order to create specialized offers best suited to meet the specific needs of customers based on the customer segment they are clustered into.

As per claim 16, Anderson et al. teaches a system configured to host the customer list **(stored on memory)** on a web-based system **(accessible through a LAN, WAN or any other conventional method of interconnecting computers)** [Column 11, lines 62-65 and Column 12, lines 5-12].

Although not taught by Anderson et al. or Blume et al., Official Notice is taken that the step of providing dealers with access to a web-based system is old and well known in the art. Dealers could be provided with user accounts (complete with passwords and data encryption methods) to enable secure access to the customer lead information and would prevent unauthorized users from viewing sensitive proprietary data. It would have been obvious to one of ordinary skill in the art at the time of invention to modify the combined teachings of Anderson et al. and Blume et al. to provide authorized users with alternative means of accessing the customer list information.

As per claim 17, Anderson et al. teaches a system configured to provide the potential customer list through a telephone (**land-based telephone line, or cellular line**) [Column 12, lines 11-12]. While Anderson et al. is silent regarding how the information is distributed to the dealer, it is old and well known in the art that communications lines may support data transfer using touch-tone telephone keys or voice recognition. It would have been obvious to one of ordinary skill in the art at the time of invention to modify the teachings of Anderson et al. and Blume et al. with the step of providing information using the touch keys of a telephone to enable the business system and customer system to be remote from each other and located anywhere in the world and facilitate the transfer of data to dealers.

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As per claim 18, the combined teachings of Anderson et al. and Blume et al. fail to teach the step of generating a mailing of the potential customer list to the dealers through at least one of electronic-mail, and printed mailings for delivery by either of a the postal service, and a courier service.

However, Official Notice is taken that the concept of mailing information to customers via electronic mail, the postal service, or a courier service is a direct marketing concept that is old and well known in the art. It would have been obvious to one of ordinary skill in the art at the time of invention to modify the combined teachings of Anderson et al and Blume et al. to include the physical delivery of the potential customer list in order to enable the company to provide such information to individuals incapable or unwilling to view the information using digital or telephonic methods.

As per claim 19, Anderson et al. teaches a system according to claim 11 wherein said server is configured to upload to said database results of customer contacts **(storing data records)** to the database **(in the storage device or other memory)** of customer information [Column 5, lines 45-47]. Although this teaching does not specifically teach the step of uploading the results of dealer initiated contacts with potential customers, it does teach the step of uploading results to the database, meeting that aspect of the claim limitation.

Although not taught by the collective teachings of Anderson et al. and Blume et al., it is old and well known in the art that marketing firms track the results of attempts by dealers to initiate contact with potential customers, this information being stored along with the rest of the customer information within a customer database. It would have been obvious to one of ordinary skill in the art at the time of invention to modify the combined teachings of Anderson et al. and Blume et al. to store the results of attempts to initiate contact with potential customers to maintain records of such actions, and would prevent undesirable and unwanted repetitive attempts by the dealer to contact potential customers.

As per claim 20, although not taught by Anderson et al., Blume et al. teaches a step of determining which customers will respond to a dealer initiated contact **(response to particular offers or marketing schemes)** using a direct response model [Column 12, lines 14-15].

As per claim 21, Anderson et al. teaches a computer software programmed to:
generate a potential customer list **(defining a collection of customer records which satisfy a set of predetermined preferences)**; [Claim 1] and
create a search request manually (by a user at a workstation), that is interactive in nature. [Column 5, lines 36-44]. The interaction with the software inherently provides a means for the user to input a time and set of customer characteristics to apply to a propensity model.

As per claim 22, Anderson et al. teaches a computer process wherein to generate a potential customer list (**defining a collection of customer records which satisfy a set of predetermined preferences**); [Claim 32] and provide the potential customer list (**outputting the collection of ordered customer records**) to one or more dealers [Claim 32]. The customer list outputted (as taught by Anderson et al.) inherently would be displayed on a computer screen and meets the limitation of the claim.

As per claim 23, the combined teachings of Anderson et al. and Blume et al. fail to specifically teach a computer wherein the database comprises data corresponding to both active and inactive customer information.

However, Official Notice is taken that companies retain customer information is retained on all customers (for a reasonable length of time), which would include currently active and inactive customers. It would have been obvious to one of ordinary skill in the art at the time of invention to apply the combined teachings of Anderson et al. and Blume et al. to include all customers (current and past, active and inactive) in an attempt to develop marketing strategies and offers with a higher likelihood of customer response, which would lead to increased profits and revenue.

As per customer 24, Anderson et al. fails to explicitly teach a computer software according to claim 21 wherein to generate a potential customer list, said computer

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displays a computer generated screen prompting a user to select customer characteristics for clustering customers into customer groups. However, due to the interactive nature of software, it is inherent that the computer would display a screen to prompt the user to input such information.

As per claim 25, the combined teachings of Anderson et al. and Blume et al. fail to teach the step of providing the potential customer list to a dealer using at least one of electronic-mail, and printed mailings for delivery by either of a postal service, and a courier service.

However, Official Notice is taken that the concept of mailing information to customers via electronic mail, the postal service, or a courier service is a direct marketing concept that is old and well known in the art. It would have been obvious to one of ordinary skill in the art at the time of invention to modify the combined teachings of Anderson et al and Blume et al. to include the physical delivery of the potential customer list in order to enable the company to provide such information to individuals incapable or unwilling to view the information using digital or telephonic methods.

As per claim 26, Anderson et al. teaches a database comprising:

a plurality of data records each containing information of interest [Column 11, lines 56-58] and

output units for outputting the results performed by a computer processor
[Column 11, line 66 - Column 12, line 1].

It is inherent that data regarding a customer's propensity to respond to an offer and when the customer will respond to an offer are pieces of information of interest, rendering the database taught by Anderson et al. as one that meets the limitations of the claim.

Although not taught by Anderson et al. or Blume et al., Official Notice is taken that companies retain customer information is retained on all customers (for a reasonable length of time), which would include currently active and inactive customers. It would have been obvious to one of ordinary skill in the art at the time of invention to apply the combined teachings of Anderson et al. and Blume et al. to include all customers (current and past, active and inactive) in an attempt to develop marketing strategies and offers with a higher likelihood of customer response, which would lead to increased profits and revenue.

As per claims 27 and 28, the teachings of Anderson et al. as presented in the analysis of claim 26 meet the limitations of the claim. It is inherent that data regarding a probability that a customer will respond to an offer and a probability that a customer will respond to an offer at a specific time are pieces of information of interest, rendering the database taught by Anderson et al. as one that meets the limitations of the claim.

As per claim 29, Anderson et al. teaches a database according to claim 26 further comprising data (**information of interest**) corresponding to customer characteristics used for clustering customers [Column 11, lines 56-58]. The customer characteristics used to cluster customers inherently comes from the available data already stored in the customer database. Thus, the database taught by Anderson et al. meets the limitation of the claim.

As per claim 30, Anderson et al. teaches a computer readable medium comprising:

at least one record of customer information (**records containing data and information of interest relating to different customers**) [Claim 1, Column 11, lines 56-58];

a record of potential customers (**records containing data and information of interest relating to different customers**) [Claim 1, Column 11, lines 56-58];

Although not taught by Anderson et al., Blume et al. teaches a predictive model for:

predicting a propensity for one or more customers within the database to respond to an offer (**predict responses to particular offers or other marketing schemes**) [Column 12, lines 13-15, Claim 2];

predicting when the customers will respond to the offer (**predicting behavior of the target consumer; predicting spending within a predicted time period**) [Claims 9 and 24].

Scoring, or predicting which prospects will buy products and services will minimize selling costs while maximizing revenue. Companies will be able to formulate better, more targeted promotional campaigns if they know in advance who is most likely to buy their products. Predicting future sales, resource requirements, client needs, or

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market share would enable a company to manage resources effectively, and accurate projections enable companies to create more efficient plans. It would have been obvious to one of ordinary skill in the art at the time of invention that the software taught by Anderson et al. would have benefited from including the predictive steps as taught by Blume et al. because the resulting method would provide for a more efficient, effective, and robust marketing approach, which would lead to increased profits and revenue.

Although a plurality of rules for identifying customers that will respond to offers or times when customers will respond to offers were not taught by Anderson et al., it is inherent that the predictive model taught by Blume et al. operates under a plurality of rules that meet the limitations of the claim.

As per claim 31, the combined teachings of Anderson et al. and Blume et al. fail to specifically teach a computer readable medium wherein the record of customer information comprises records of active and inactive customers.

However, Official Notice is taken that companies retain customer information is retained on all customers (for a reasonable length of time), which would include currently active and inactive customers. It would have been obvious to one of ordinary skill in the art at the time of invention to apply the combined teachings of Anderson et al. and Blume et al. to include all customers (current and past, active and inactive) in an

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attempt to develop marketing strategies and offers with a higher likelihood of customer response, which would lead to increased profits and revenue.

As per claim 32, Blume et al. teaches a computer readable medium that enables users to cluster customers into customer groups according to customer characteristics **(generating groupings based on the analysis of consumer financial behavior)** [Column 3, lines 20-26]. The software enabling the user to choose characteristics to cluster the customers inherently codifies a plurality of rules, as might be defined by an algorithm or specific technique, meeting the limitation of the claim.

As per claim 33, although not taught by Anderson et al., Blume et al. teaches a computer readable medium **(HTML, Ascii, Excel formats)** according to claim 32 further comprising records of clustered customer groups **(various segment reports)**. [Column 11, line 17, Reference characters 428, 430, and 432 of Figure 4A]

As per claim 34, Anderson et al. teaches a method for providing a list of customer leads to dealers attempting to sell a product, said method comprising the steps of:

selecting, from an electronic interface, customer characteristics within the database to apply to a propensity model for identifying customers likely to respond to an offer **(to create a search request manually by a user at a workstation, that is interactive in nature)** [Column 5, lines 36-44];

selecting, from the electronic interface, a time when the offer will be presented to customers **(to create a search request manually by a user at a workstation, that is interactive in nature)** [Column 5, lines 36-44];

requesting, from the electronic interface **(selecting records that would be pursued)**, a potential customer list [Column 3, lines 36-38]; and

delivering the customer list to at least one dealer **(using land-based telephone line, or cellular line or making it accessible through a LAN, WAN or any other conventional method of interconnecting computers)**; [Column 12, lines 5-12].

Although the generation of a database is not taught by Anderson et al., a database of customer information is already coupled to the workstation computer and input units, meeting the limitation of the claim.

As per claim 35, the combined teachings of Anderson et al. and Blume et al. fail to specifically teach a method according to claim 1 wherein the database of customer information includes both active and inactive customer files.

However, Official Notice is taken that companies retain customer information is retained on all customers (for a reasonable length of time), which would include currently active and inactive customers. It would have been obvious to one of ordinary skill in the art at the time of invention to apply the combined teachings of Anderson et al. and Blume et al. to include all customers (current and past, active and inactive) in an

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attempt to develop marketing strategies and offers with a higher likelihood of customer response, which would lead to increased profits and revenue.

As per claim 36, although not taught by Anderson et al., Blume et al. teaches a method according to claim 34 wherein requesting the potential customer list comprises the step of selecting clustering criteria to generate customer groups (**generating grouping based on the analysis of consumer financial behavior**) which identify specific needs (**underlying consumer interests**) for each customer [Column 3, lines 20-26].

It would have been obvious to one of ordinary skill in the art at the time of invention to modify the teachings of Anderson et al. to include the clustering step as taught by Blume et al. in order to create specialized offers best suited to meet the specific needs of customers based on the customer segment they are clustered into.

As per claim 37, Anderson et al. teaches a method according to claim 34 wherein said step of delivering the potential customer list further comprises the step of providing dealer access to the customer list through a telephone based system (**land-based telephone line, or cellular line**) [Column 12, lines 11-12].

As per claim 38, the combined teachings of Anderson et al. and Blume et al. fail to teach a method according to claim 34 wherein said step of delivering the customer

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list further comprises the step of mailing the customer list to the dealers through at least one of electronic-mail, the postal service, and a courier service.

However, Official Notice is taken that the concept of mailing information to customers via electronic mail, the postal service, or a courier service is a direct marketing concept that is old and well known in the art. It would have been obvious to one of ordinary skill in the art at the time of invention to modify the combined teachings of Anderson et al and Blume et al. to include the physical delivery of the potential customer list in order to enable the company to provide such information to individuals incapable or unwilling to view the information using digital or telephonic methods.

As per claim 39, Anderson et al. teaches an apparatus comprising:

means **(input device, storage device, and memory)** for storing a database of customer information [Column 11, lines 38-65];

means for generating a potential customer list of customers likely to respond to an offer and the time which they are likely to respond to the offer **(defining a collection of customer records which satisfy a set of predetermined preferences)**; [Claim 1];
and

means for delivering the potential customer list to at least one dealer **(using land-based telephone line, or cellular line)** [Column 12, lines 11-12] **(or making it accessible through a LAN, WAN or any other conventional method of interconnecting computers)**; [Column 11, lines 62-65 and Column 12, lines 5-12].

Although not taught by Anderson et al., Blume et al. teaches the steps of:

means **(predictive model)** for identifying customers with a propensity to respond to an offer **(predict responses to particular offers or other marketing schemes)**

[Column 12, lines 13-15, Claim 2];

means **(predictive model)** for identifying a time when a customer will respond to an offer **(predicting behavior of the target consumer; predicting spending within a predicted time period)** [Claims 9 and 24];

Scoring, or predicting which prospects will buy products and services will minimize selling costs while maximizing revenue. Companies will be able to formulate better, more targeted promotional campaigns if they know in advance who is most likely to buy their products. Predicting future sales, resource requirements, client needs, or market share would enable a company to manage resources effectively, and accurate projections enable companies to create more efficient plans. It would have been obvious to one of ordinary skill in the art at the time of invention that the method taught by Anderson et al. would have benefited from including the predictive steps as taught by Blume et al. because the resulting method would provide for a more efficient, effective, and robust marketing approach, which would lead to increased profits and revenue.

As per claim 40, although not taught by Anderson et al., Blume et al. teaches the step of generating a potential customer list further comprising clustering customers into

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customer groups according to customer characteristics **(generating groupings based on the analysis of consumer financial behavior)** [Column 3, lines 20-26].

It would have been obvious to one of ordinary skill in the art at the time of invention to modify the teachings of Anderson et al. to include the clustering step as taught by Blume et al. in order to create specialized offers best suited to meet the specific needs of customers based on the customer segment they are clustered into.

As per claim 41, the combined teachings of Anderson et al. and Blume et al. fail to teach the step of delivering the potential customer list by telephoning the customer list to the dealer.

However, Official Notice is taken that the concept of mailing information to customers via electronic mail, the postal service, or a courier service is a direct marketing concept that is old and well known in the art. It would have been obvious to one of ordinary skill in the art at the time of invention to modify the combined teachings of Anderson et al and Blume et al. to include the physical delivery of the potential customer list in order to enable the company to provide such information to individuals incapable or unwilling to view the information using digital or telephonic methods.

As per claim 42, Anderson et al. teaches the step of delivering the potential customer list further comprises the step of providing dealer access to the customer list

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through a telephone based system (**land-based telephone line, or cellular line**)

[Column 12, lines 11-12].

As per claim 43, the combined teachings of Anderson et al. and Blume et al. fail to specifically teach a database comprising data corresponding to active and inactive customers.

However, Official Notice is taken that companies retain customer information is retained on all customers (for a reasonable length of time), which would include currently active and inactive customers. It would have been obvious to one of ordinary skill in the art at the time of invention to apply the combined teachings of Anderson et al. and Blume et al. to include all customers (current and past, active and inactive) in an attempt to develop marketing strategies and offers with a higher likelihood of customer response, which would lead to increased profits and revenue.

Although not taught by Anderson et al., Blume et al. teaches a predictive model used to identify a customer's propensity to respond to an offer. The predictive model inherently codifies at least one rule to be applied to the customer data to identify a customer's propensity to respond to an offer. It would have been obvious to one of ordinary skill in the art at the time of invention to modify the teachings of Anderson et al. to include the rules codified by the predictive model as taught by Blume et al. to establish a set of preferences used as input parameters in the predictive model, as

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modification of these rules would instantly propagate through the database and provide new results that satisfy the new rules.

Claims 44 and 45 are rejected under the same rationale used to reject claim 43. Although not taught by Anderson et al., the predictive model as taught by Blume et al. codifies rules that are applied to customer data to identify which customers will respond to an offer and when they will respond. Similarly, the clustering technique employed by Blume et al. is governed by a set of rules that are applied to the customer data to cluster customers. It would have been obvious to one of ordinary skill in the art at the time of invention to modify the teachings of Anderson et al. to include the predictive model and clustering technique as taught by Blume et al. to establish a set of preferences used as input parameters in the predictive model and clustering technique, as modification of these rules would instantly propagate through the database and provide new results that satisfy the new rules.

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Chou, Grossman, Gunopulos, and Kamesam's "Identifying Prospective Customers" (reference 1-U) teaches the impact of data mining and its applicability in

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identifying prospective customers from a large pool of candidates based on available data.

Mummert's "Who Is Worthy?" (reference 1-V) teaches that banks are using database technology to develop analytical tools (including models) to identify top prospects. Customers are segmented and a risk profile score is generated. The models developed are used to predict credit worthiness and the likelihood to respond to offers.

Thearling's "Increasing Customer Value by Integrating Data Mining and Campaign Management Software" (reference 1-W) teaches the importance of segmenting customers to identify customers with favorable conditions (high profit potential) and the need to build and execute campaigns that favorably impact the behavior of those individuals. Data mining builds models by using database inputs to predict customer behavior. The model generates a score that indicates the likelihood that the customer will exhibit a particular behavior (such as a likelihood of responding to a particular offer).

Nathan's "Chase Using Customer Data Base for Marketing" (reference 1-X) teaches that Chase Manhattan Corporation is using database technology to predict which of its customers are more likely to want particular products. This approach is used to identify prospects, target direct mail offers, and issue pre-approved credit.

PR Newsire released a press release, "NCR to Help Businesses Harness Power of Event-Driven Marketing with New 'MarketingAgent' Software" (reference 2-U) that NCR Corporation has disclosed the release of MarketingAgent, which is part of its Customer Relationship Management Solutions (CRMS) 4.0 package, which is a portfolio of software and services that enables businesses to build better relationships with their most valuable customers. ProspectAdvisor is one of the modules included in the CRMS 4.0 offering and is a predictive modeling software for customer acquisition. ProspectAdvisor helps identify potentially profitable customers that a company should target for acquisition and is used in conjunction with ChurnSentry and GrowthAdvisor to create a total customer acquisition, retention and growth tool.

Precision Marketing published "Be Prepared When Meeting the Relations BYLN" (reference 2-V) in 2000, and it teaches that Customer Relationship Management (CRM) should be seen as a business philosophy to help companies increase revenue, reduce costs, build and retain a loyal customer base, and find and acquire new profitable customers. One of the basic principles of CRM is to segment customer based on their profitability and lifetime value.

Messmer's "PeopleSoft Offers Up 'Accelerated' PeopleSoft 8 for Midsized Companies" (reference 2-W) discloses the offering of PeopleSoft 8 Accelerated e-Business Solutions and PeopleSoft Customer Relationship Analytics. The Customer Relationship Analytics software suite comes with a "Marketing Insight" tool that

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quantifies the effectiveness of marketing campaigns based on leads generated and the profiles of respondents. Other tools measure the effectiveness of customer relationship management activities and track the best customers.

Levin and Zahavi's "Predictive Modeling Using Segmentation" (reference 2-X) teaches a plurality of algorithms and methods used to segment customers into groups. A performance comparison is made of the RFM and FRAC methods, automatic tree classifiers involving the CHAID algorithm, the AID algorithm, and a newly developed method based on genetic algorithm.

Egol's "What's New in Database Marketing Software" (reference 3-U) discloses a plurality of database marketing software products being used to predict the results of promotional programs based on customer and prospect modeling. Among the software products covered are AnalytiX, Genesis version 4.0, MarketGenius, DataBase Mining Workstation, and Advanced Software Applications ModelMAX.

Brown's "A Model For Effective, Customer-Oriented Market Plans" (reference 3-V) teaches that the customer-oriented marketing plan model has emerged as an effective blueprint in helping management identify important market segments and build effective sales and marketing campaigns. Brown teaches that data mining software complements multidimensional databases by supporting the modeling functions of

customer-oriented market planning. Data mining also provides models to make predictions regarding customer behavior and likelihoods.

"SPSS Data Mining" (reference 3-W) teaches that logistic regression and neural nets are vital in profiling customers to identify growth markets. These tools enable companies to predict future behavior by estimating the likelihood of an event, such as a customer purchasing a particular product.

Isaac and Tooker's "The Many Faces of CRM" (reference 3-X) teaches the impact that a CRM system can have on a business. Five important ways that CRM systems impact a business include increasing customer retention, reducing the need to find new customers, increasing revenue from existing customers, extending the lifetime (and lifetime value) of customers, and strengthening the brand.

Martin et al. (U.S Patent #6,338,066) teaches a web-based system for predicting the likely behavior of users. Given a log of previous behaviors, the system gives a meaningful classification of those items and predicts future behavior using a quantitative model.

Boe et al. (U.S Patent #6,236,975) teaches a system and method for profiling customers for targeted marketing. The system creates demographic characteristics for each customer.

Nakisa (PGPub 2001/0027408) teaches a method of predicting future behavior of an individual by analyzing the past behavior.

Chen et al. (PGPub 2003/0105658) teaches a customer profiling apparatus for conducting customer behavior pattern analysis. A data mining system is coupled to a data warehouse to build and update customer behavior profiles by mining customer records.

Honarvar (U.S Patent #6,321,206) teaches a decision management system that allows an organization to monitor and evaluate client data relating to client interactions with the organization, and to modify organizational strategies accordingly. The system applies different strategies to different categories of clients, tracks the performance of the clients, and refines the applied strategies over time.

Bankier et al. (U.S Patent #6,567,814) teaches a computer-based method and apparatus for knowledge discovery from databases. Neural networks are used to evaluate performance and to cluster data. The knowledge discovered is used in practical applications such as making predictions about new data, and identifying and explaining hidden patterns and trends in existing data, such as predicting whether a loan application should or should not be granted to a particular applicant based on the

history of the applicant and similar applicants. An algorithm may be trained to give an indication of how likely the applicant is to repay the loan.

Williams et al. (U.S Patent #6,658,391) teaches a method and apparatus for understanding and predicting customer behavior. Data is analyzed and information is available to multiple users simultaneously through the World Wide Web.

Rebane (U.S Patent #6,539,392) teaches a system and method for data collection, evaluation, information generation and presentation. The systems and methods use predictor modules that use recent historical data.

Rebane (U.S Patent #6,662,192) teaches a system and method for data collection, evaluation, information generation and presentation

Lazarus et al. (U.S Patent #6,430,539) teaches the predictive modeling of consumer financial behavior. Consumer transaction data is applied to predictive models associated with merchant segments that represent specific clusters of merchants. Merchant segments are trained using past consumer transaction data to predict spending behavior in subsequent time periods. The analysis of consumers associated with a segment identifies selected consumers according to predicted spending in the segment or other criteria, and the targeting of promotional offers specific to the segment and its methods.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter Choi whose telephone number is (571) 272 6971. The examiner can normally be reached on M-F 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tariq Hafiz can be reached on (571) 272-6729. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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PC
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